

Shade Starts Here

Use explanation, scoped evidence and closure in your own writing.

8.T.T.2.d “Apply multiple expository techniques (e.g., main idea, facts, statistics, key details, text features, sense of closure) to enhance writing and engage audiences. (C)”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the two cooling processes in the first section. Circle the study's number range and box the words that limit its scope. Mark the final sentence and explain how it gives the explanation closure.

Plan Shade, Then Check the Site

How vegetation can cool

Trees can contribute to cooler outdoor spaces through shade and evapotranspiration. Leaves and branches reduce sunlight reaching surfaces below them. Water evaporating through plants and from nearby surfaces uses heat, which can cool the air. These processes explain why vegetation can be part of a cooling plan; they do not guarantee the same result at every site.

A statistic with limits

EPA's 2008 Trees and Vegetation compendium describes a multi-month study at two buildings. It reports maximum surface-temperature reductions of 20-45°F for walls and roofs. Those measurements concern surfaces, not a guaranteed change in air temperature or a prediction for every school path.

Source: U.S. Environmental Protection Agency, Reducing Urban Heat Islands: Compendium of Strategies, “Trees and Vegetation,” printed pages 2-3. www.epa.gov/sites/default/files/2017-05/documents/reducing_urban_heat_islands_ch_2.pdf

From evidence to a school question

Consider a fictional school council planning a shaded waiting area. Its facilities team has not yet selected a location, species or maintenance arrangement. Students can explain the cooling processes and the study's limits, then ask the team to compare suitable sites. A useful explanation ends with a proportionate next step: learn what fits this school before promising a particular temperature reduction.

2 ANSWER WITH EVIDENCE Use the passage

1 How do shade and evapotranspiration differ?

2 What exactly does the 20-45°F result describe, and what does it not promise?

3 How do the section headings and final sentence help readers?

3 YOUR TURN Your own words

Write an explanation for your student council about investigating a shaded waiting area. State a main idea, explain both cooling processes, accurately use the study result with its limits, and add a useful visible text feature and a closing idea. Treat the school situation as fictional and site details as unconfirmed.

1. Select and organize

Choose the details that support your main idea. Plan a feature that helps readers distinguish the evidence from the proposed next step.

2. Write the explanation

Use developed paragraphs and a separate title. Integrate the mechanisms and scoped statistic, display the chosen feature and end with closure tied to the council's purpose.

3. Check the effect

Explain how two expository techniques work together for this audience. Revise any wording that turns a study result into a universal promise.

PART 1 • READ AND MARK

Underline the two cooling processes in the first section. Circle the study's number range and box the words that limit its scope. Mark the final sentence and explain how it gives the explanation closure. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How do shade and evapotranspiration differ?	Shade reduces sunlight reaching surfaces. Evapotranspiration involves evaporation of water through plants and nearby surfaces, using heat and potentially cooling air.
2	What exactly does the 20-45°F result describe, and what does it not promise?	Maximum surface-temperature reductions for walls and roofs at two buildings in a multi-month study. It is not a guaranteed air-temperature drop or a prediction for every school path.
3	How do the section headings and final sentence help readers?	Headings distinguish the mechanism, evidence and application. The final sentence returns to the school decision and gives a cautious next step rather than repeating the statistic as a promise.

PART 3 · YOUR TURN (SAMPLE ANSWER)

Shade Is Worth Investigating

Our fictional council should ask the facilities team to investigate a shaded waiting area. Vegetation can provide shade and cooling through evapotranspiration, giving us reasons to examine possible sites.

What the evidence says

Shade reduces incoming sunlight, while evaporation uses heat. EPA's cited study at two buildings found maximum wall and roof surface-temperature reductions of 20-45°F over several months. Those are not air-temperature measurements or a guaranteed result for our school.

A practical next step

Ask the facilities team to compare possible locations and maintenance needs before selecting a plan. Investigating a suitable site turns a general cooling idea into a school decision supported by evidence.

Technique check

The title presents the main idea; headings separate mechanism, evidence and application. The statistic has a clear limit, and the final sentence closes by linking the explanation to the council's next action. These choices help students understand both why the proposal is worth exploring and why its outcome is not already known.

TEACHER ASSESSMENT NOTES

Assess multiple expository techniques used accurately and together: main idea, explanatory details, a scoped statistic, a visible feature and closure. Look for a visible title and headings that organize a developed explanation. EPA evidence concerns surface-temperature maxima at two buildings, not a universal schoolyard or air-temperature reduction.